

## CLAIMS

What is claimed is:

1. A method of timing channel allocation in a wireless communications unit comprising:
  - 5 identifying a plurality of channels operable for wireless communication with a remote wireless communications unit; and
  - scheduling the channels for wireless communication according to a predetermined cycle, wherein the remote wireless communications unit has a remote predetermined cycle out of phase with the predetermined cycle.
- 10 2. The method of claim 1 wherein the wireless communication unit is a base station processor and the remote wireless communication unit is a subscriber access unit.
3. A system for allocating wireless channels in a wireless communication network comprising:
  - 15 a wireless communication unit operable for wireless communication;
  - at least one remote wireless communication unit operable for wireless communication with the wireless communication unit via a wireless link;
  - a plurality of wireless channels in the wireless communication unit and in the at least one remote wireless communication unit;
  - 20 a local scheduler operable to schedule the wireless channels in the wireless communication unit at a local predetermined cycle; and
  - a remote scheduler operable to schedule the wireless channels in the remote wireless communication unit at a remote predetermined cycle, wherein the local predetermined cycle and the remote predetermined cycle are out of
  - 25 phase.

4. The method of claim 3 wherein the wireless communication unit is a base station processor and the remote wireless communication unit is a subscriber access unit.
5. A method of allocating wireless channels in a wireless communication network comprising:
  - identifying at least one forward channel operable for wireless communication to a subscriber access unit;
  - identifying at least one reverse channel operable for wireless communication to a base station processor;
  - scheduling the forward channel for wireless communication according to a forward cycle; and
  - scheduling the reverse channel for wireless communication according to a reverse cycle, wherein the forward cycle and the reverse cycle are out of phase.
6. The method of claim 5 wherein scheduling the forward channel comprises scheduling by a forward scheduler in the base station processor, and scheduling the reverse channel comprises scheduling by a reverse scheduler in the subscriber access unit.
7. The method of claim 5 wherein the forward cycle corresponds to a forward interval, and the reverse cycle corresponds to a reverse interval.
8. The method of claim 7 wherein the forward interval and the reverse interval are equal.
9. The method of claim 7 wherein the forward interval and the reverse interval correspond to an integral multiple.

10. The method of claim 7 wherein the forward interval and the reverse interval are between 26 and 27 ms.
11. The method of claim 7 wherein the forward interval and the reverse interval are between 13 and 14 ms out of phase.
- 5 12. The method of claim 7 wherein the forward interval and the reverse interval are an epoch.
13. A system for wireless communications comprising:  
a base station processor connected to a public access network and operable for wireless communication via a plurality of wireless channels;  
10 at least one subscriber access unit operable for wireless communication with the base station processor via the plurality of wireless channels;  
a scheduler operable to allocate the wireless channels for wireless communication at a predetermined interval, wherein the scheduler is further operable to schedule the wireless channels for wireless communication to the  
15 subscriber access units according to a forward cycle, and to schedule the wireless channels for wireless communication to the base station processor according to a reverse cycle, such that the forward cycle and the reverse cycle are out of phase.
14. The system of claim 13 wherein the scheduler further comprises a forward scheduler in the base station processor and a reverse scheduler in the subscriber  
20 access unit.
15. The system of claim 13 wherein the forward cycle occurs at a forward interval and the reverse cycle occurs at a reverse interval.

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16. The system of claim 15 wherein each of the forward channels and each of the reverse channels is allocated for a predetermined duration based on the forward interval and the reverse interval, respectively.
17. The system of claim 15 wherein the forward interval of the forward cycle and the reverse interval of the reverse cycle are equal in duration.
18. The system of claim 15 wherein the frequency of the forward interval and the frequency of the reverse interval correspond to an integral multiple.
19. The system of claim 15 wherein the duration of the forward interval and the duration of the reverse interval is between 26 and 27 ms.
20. The system of claim 15 wherein the forward interval and the reverse interval are between 13 and 14 ms out of phase.
21. The system of claim 15 wherein the forward interval and the reverse interval are an epoch.
22. A computer program product including computer program code for allocating wireless channels in a wireless communication network comprising:
- computer program code for identifying at least one forward channel operable for wireless communication to a subscriber access unit;
  - computer program code for identifying at least one reverse channel operable for wireless communication to a base station processor;
  - computer program code for scheduling the forward channel for wireless communication according to a forward cycle; and

23. A computer data signal for allocating wireless channels in a wireless  
5 communication network comprising:  
    program code for identifying at least one forward channel operable for  
wireless communication to a subscriber access unit;  
    program code for identifying at least one reverse channel operable for  
wireless communication to a base station processor;  
10      program code for scheduling the forward channel for wireless  
communication according to a forward cycle; and  
    program code for scheduling the reverse channel for wireless  
communication according to a reverse cycle, wherein the forward cycle and the  
reverse cycle are out of phase.

15 24. A system for allocating wireless channels in a wireless communication network  
comprising:  
    means for identifying at least one forward channel operable for wireless  
communication to a subscriber access unit;  
    means for identifying at least one reverse channel operable for wireless  
20 communication to a base station processor;  
    means for scheduling the forward channel for wireless communication  
according to a forward cycle; and  
    means for scheduling the reverse channel for wireless communication  
according to a reverse cycle, wherein the forward cycle and the reverse cycle are  
25 out of phase.